THE NATIONAL ECONOMY OF GERMANY

An analysis of the economic position in totalitarian countries is beset with difficulties. There is first of all some uncertainty concerning facts. This is due at least as much to the abundance of statistics in certain directions as their more or less complete lack in others. The available data, certain speeches and articles by members of the German Government, as well as oral information, however, permit inferences to be drawn which give an indication of the working of the economic system.

More basic difficulties are encountered when we attempt to evaluate this evidence. What may be the criteria on the basis of which we can judge ? The question which this paper tries to answer is not whether totalitarianism is preferable to individualism and liberty, but whether totalitarian systems can be regarded as economically stable on their own terms, whatever we think of their aims and methods.

1. *Phases of the Economic Expansion in Germany.*

The German economic system was still in a position of almost complete collapse when President Hindenburg was persuaded to hand over political power to Hitler. The following table gives a clear picture :

Table I.

1929 *to December* 1932.

	Employment. (000's.)	Unemployment. (000's.)	Hours Worked.	Index of Production (1929 = 100). Germany. Total.	Consumption Goods.	Investment Goods.
1929 . .	17,595	1,892	7·67	100	100	100
1930 . .	16,409	3,076	7·37	85·9	94	81·6
1931 . .	14,336	4,520	7·08	67·6	89·2	52·6
1932 June .	12,686	5,476	6·94	60·7	80·5	48·4
Dec. .	12,532	5,773	6·90	61·9	82·3	49·4

TABLE I (*continued.*)

	Index of Production (1929 = 100).			Wholesale Price Index (1929 = 100).		Foreign Trade Yearly Balances. (Rm. 000's.)
	Great Britain.	U.S.A.	France.	Germany.	Great Britain (*Economist*).	
1929	100	100	100	100	100	− 783,459
1930	92·3	80·7	100·4	90·8	84·0	+ 935,095
1931	83·8	68·1	88·9	80·8	70·2	+2,478,840
1932 June	84·3	49·7	66·9	70·1	63·6	
Dec.	84·9	55·5	70·6	67·3	66·1	+1,072,668

Gross investment declined from Rm. 13·7 milliards to Rm. 4·2 milliards. In consequence national income fell from Rm. 75·4 in 1928 to Rm. 45·2 milliards in 1932.[1]

The Nazi Government continued and enlarged the plans which had been initiated already by earlier Governments to deal with this desperate position, to absorb unemployment and give an impetus to economic activity. The effect is shown in Table II.

This statistical survey tends to indicate that the German experiment in recovery falls into two distinct parts, each dominated, as it appears, by different policies. The first period seems to end with the year 1934. In this period the usual pattern of cyclical recovery is discernible. The increase in employment is more rapid in the investment-goods industries than in those catering for consumption demand. In both the rate of increase seems to be accelerating. The increase in business activity results in a rapid worsening of the balance of international trade.

At the beginning of 1935 the picture changes completely. The acceleration of activity in the production-goods industries hardly slackens; but the increase in the output of consumption goods falls. The value of imports falls, once more, and exports which were declining without interruption begin to increase. Throughout 1935–36 all economic data, except those for investment, show symptoms similar to deflation. But investment is steadily increasing, and consumption once more resumes its upward trend, though at a very much reduced rate. In the spring of 1937 a further significant stage is reached; the reserve of unemployed labour is being exhausted. Ever since then a shortage, especially of certain skilled labour, has been making itself felt.

[1] If the decline in prices is taken into account the fall is smaller: from Rm. 75·4 milliards to Rm. 56·8 milliards. *Statistisches Jahrbuch für das Deutsche Reich*, 1937 (quoted below as *Jahrbuch*), Berlin, 1938, p. 533.

TABLE II.

March 1933 *to March* 1938.

		Employment. (000's.)	Unemployment. (000's.)	Hours Worked.	Index of Production (1929 = 100). Germany Total.	Germany Consumption Goods.	Germany Investment Goods.	Great Britain.	U.S.A.	France.	Wholesale Price Index (1929 = 100). Germany.	Great Britain. (*Economist*).	Foreign Trade Yearly Balances. (Rm. 000's.)
1933	June . .	13,307	4,857	7·26	69·2	91·8	55·6	86·5	77·3	79·9	67·7	70·3	
	Sept. . .	13,921	3,849	7·18	70·6	92·8	75·4	86·6	70·6	79·2	69·2	70·4	
	Dec. . .	13,287	4,059	7·37	65·8	91·8	63·6	93·0	63·1	76·3	70·1	69·2	+667,793
1934	Mar. . .	14,687	2,798	7·44	83·9	99·3	74·6	98·9	70·6	74·9	69·9	70·8	
	June . .	15,530	2,481	7·46	89·0	107·4	78·1	98·7	69·8	71·3	70·8	70·7	
	Sept. . .	15,621	2,282	7·38	85·7	93·2	81·2	94·8	59·7	68·4	73·2	71·1	
	Dec. . .	14,873	2,605	7·48	86·3	91·0	83·5	103·8	72·3	66·9	73·6	71·1	−284,158
1935	Mar. . .	15,279	2,402	7·34	90·7	89·2	93·0	105·4	74·0	66·7	73·4	71·5	
	June . .	16,504	1,877	7·34	92·4	81·1	101·0	103·8	72·3	66·7	73·8	73·7	
	Sept. . .	16,634	1,714	7·44	102·0	92·6	112·9	103·2	74·8	67·4	74·6	75·7	
	Dec. . .	15,582	2,508	7·55	96·6	87·1	101·2	112·2	87·4	68·8	75·4	77·3	+110,972
1936	Mar. . .	16,416	1,937	7·55	100·0	96·1	103·5	114·7	78·2	72·4	75·5	76·7	
	June . .	17,675	1,315	7·54	108·0	92·2	121·8	115·0	86·6	70·3	75·8	76·0	
	Sept. . .	17,886	1,035	7·69	112·6	104·8	122·1	114·0	91·6	68·1	76·1	79·7	
	Dec. . .	16,955	1,479	7·76	112·1	105·7	114·8	123·1	101·7	71·7	76·5	85·8	+550,207
1937	Mar. . .	17,497	1,245	7·71	111·9	101·4	115·9	122·3	99·2	87·2	77·3	94·4	
	June . .	18,941	648	—	117·5	98·2	130·0	124·6	95·8	82·2	77·3	91·2	
	Sept. . .	19,105	469	—	123·2	112·0	132·5	121·5	93·3	78·8	77·4	88·3	
	Dec. . .	18,109	995	—	120·0	112·1	123·2	127·3	70·6	85·3	76·9	83·5	+443,000
1938	Mar. . .	18,831	508	—	123·1	112·0	129·1	123·6	66·4	78·7	77·1	80·2	

In retrospect, the policies adopted in the period 1933–34—apart from certain features, such as marriage loans, strategic motor roads, etc., which will remain part of the German economic system—seem stop-gap measures designed to end the intolerable social conditions consequent on the extreme deflationary policy, the original function of which was first hampered, then destroyed, by the growing demands of rearmament.[1] The authorities could

[1] The problem of this first period, the measures adopted to solve them and their effect on the economic system have been fully analysed by Dr. Grebler ("Work-Creation Policy in Germany, 1932–35," *I.L.O. Review*, Vol. XXXV, Nos. 3 and 4, 1937). They represent an example of a far-reaching (Dr. Grebler enumerates nine separate programmes accompanied and followed up by a host of further measures) work-creation policy, and are of direct interest for the the present paper.

Both the change of Governments and the struggle between the different viewpoints in the National Socialist Government can be discerned in the change of the character of the successive programmes. The earlier plans were mainly based on "indirect effects"—*i.e.*, sought to stimulate private investment by tax relief and similar incentives. Later measures increasingly consisted of direct public works (including fortifications and other military buildings), and tried to diminish unemployment, even at the cost of discouraging private investment. This is shown to some extent by the importance of extra-economic employment (especially of juveniles such as by the Labour Service, the year on the land and military service) in the later programmes. It is demonstrated conclusively by the fact that very great pressure was put on employers to increase or change their staffs uneconomically. In consequence, productivity per head, which had been increasing throughout the depression, suddenly dropped in 1934, though industry was still working far below the optimum level of output. The fixing of the wage rates seems, in this period, at least as much a consequence of the idea of spreading work as of the determination to prevent inflation. That the idea of spreading work was not wholly absent in Germany is demonstrated by the fact that at first a 40-hour week was introduced on public works. The measures facilitating the elimination of women in industry had similar aims. There was also a campaign against accumulation of jobs and stern measures against the mobility of labour. All this has been swept away by the shortage of labour which developed later.

Altogether over Rm. 5 milliards was spent directly, out of which over Rm. 3·1 milliards was financed by the issue of special work creation bills rediscountable at the Reichsbank. The bulk of the expenditure was undertaken in 1934. By the end of 1935 almost the whole of the credits voted had been exhausted.

The effectiveness of work creation programmes in general cannot, of course, be tested on the German example. It was hampered at the outset by the circumstances peculiar to the German position resulting from the foreign loan inflation between 1924 and 1929. And if some members of the National Socialist Government may at the beginning of the experiment have thought of these programmes as more than relief measures leading up to rearmament, as measures facilitating the recovery of private initiative, they must soon have abandoned the attempt to carry their view into effect. The policy actually followed did not merely fail to help the primary stimulus being transmitted to private demand, both consumption and investment (*e.g.*, the scale of taxation was not lowered when revenue began to increase), but, as we shall see below, was increasingly calculated to prevent this. After 1934 this policy was certainly conscious. It may have been already so earlier. Prof. Bresciani Turroni ("The Multiplier in Practice," *Review of Economic Statistics*, May 1938) does not seem

have abandoned further public expenditure—*i.e.*, rearmament—trusting that the unemployed reserve of labour would be absorbed by the revival of private activity. This choice was the more attractive from the point of view of pure economic reason, as world trade began to revive. Thus by appropriate measures such as devaluation or the granting of increased export bounties on the lines followed by other countries (especially Austria), exports could have been increased, and would have added to the impetus of the revival and secured the additional foreign exchange required by the expansion in consumption. This choice never seems to have been considered. State expenditure developed step by step from an expedient designed to stimulate private investment into an end in itself. Consumption was confined within the limits of the available resources of labour and equipment. Accordingly the control of all phases of economic life had to be extended.[1]

2. *National Money Income and Investment*, 1928–37.

This becomes apparent from a consideration of the changes in national money income and investment.

Gross investments in Germany increased in 1937 to the level of 1928 of over Rm. 16 milliards p.a. [2]—*i.e.*, by almost Rm. 12 milliards p.a. from the lowest rate reached in 1932. The importance of State investment proper increased from 28·6 per cent. to

to appreciate the peculiarity of the German experiment. Otherwise he would have chosen a different title for his interesting analysis of the first period of the German revival.

[1] In the case of the three great Powers, Germany, Italy and Japan, this is the essence of foreign exchange control, and foreign exchange control is the basis of their whole economic system (cf. below). The Van Zeeland report and the recently published report of the Financial Committee of the League of Nations deal exclusively with foreign exchange restriction of a wholly different character—*i.e.*, where these restrictions were imposed to "safeguard" the credit structure, the balance of trade and the value of the currency of the restricting country. Such systems of control were adopted by the small debtor nations. It should be emphasised that conclusions which may be justified in the case of the latter need not necessarily be applicable to the former. Restrictions merely aimed at preventing the export of capital are a further category.

[2] Both figures include inventories. We do not know about the movement of the inventory position in the last few years. It is supposed to be rather small. In above calculation it is assumed that the rise in inventories was at most 1 milliard last year—*i.e.*, 40 per cent. of that in 1929, an assumption which is reasonable considering the shortage of goods. Net investment increased from a deficit of 1·6 (3·5 if we include inventories) to somewhere about 10–11 milliards. Net investment was 7·3 milliards in 1928, the increase in inventories 2·6 milliards. There was a gold import of 866 millions. See Marschak and Lederer, *Kapitalbildung*, p. 250.

TABLE III.[1]

(In milliards Rm.)

	1928.	1932.	1933.	1934.	1935.	1936.	1937.
1. National income . .	75·4	45·2	46·6	52·7	57·9	62·6	68·5
2. Investment :							
(a) Total gross . .	13·7	4·2	5·1	8·3	11·2	13·8	15·5–16·0
(b) Total net . .	7·3	−1·6	−0·75	2·4	5·6	7·6	9–10
(c) Public gross, incl. transport . .	4·6	1·7	2·2	4·1	6·5	7·6	8–9 (?)
(d) Public gross, excl. transport . .	2·6	1·1	1·4	2·9	—	—	—
(e) Public net, excl. transport . .	1·5	0·4	0·7	2·2	—	—	—
(f) Public net, incl. transport . .	2·3	0·3	0·6	2·2	—	—	—
(g) Private industry : Net . . .	1·1	−0·9	−0·7	−0·2	—	—	
Gross . .	2·6	0·44	0·55	1·07	1·66	2·1	—
(h) Inventories . .	2·6	−1·9	0·6	1·3	—	—	—
(i) Total gross, incl. inventories .	16·1	2·3	5·7	9·6	—	—	
(k) Total net, excl. inventories .	9·6	−3·5	−0·2	3·7	—	—	—
2b. As per cent. of 1 .	9·3	—	—	4·6	9	12·1	13·9
	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.	Total over period.	
Increase in gross investment	0·9	3·2	2·9	2·6	2·0	11·6	
Increase in national income	1·4	6·1	5·2	4·7	5·9	23·3	

54 per cent. of total investment.[2] The increase in national income was Rm. 23·3 milliards, from Rm. 45·2 to Rm. 68·5 milliards. It was still something like Rm. 7 milliards smaller than in 1928. The ratio of net investment to national income increased from 9·3 per cent. to 13·9 per cent., gross investment, excluding inventories, increased from Rm. 13·7 milliards to roughly Rm. 16 milliards—*i.e.*, from 18·2 per cent. to over 23 per cent. of the national income. This shift indicates that a tremendous pressure must have been exerted on consumption.[3]

[1] *Jahrbuch*, 1937, pp. 533–540, and *Reichskreditgesellschaft A.G. Berlin, Deutschlands wirtschaftliche Lage an der Jahreswende*, 1937–38, p. 6 (quoted below as *R. Kreditgesellschaft* and the year).

[2] This figure for State investment is not identical with either total State *loan* expenditure or *total* expenditure on *armaments* (see below). It is not known how much money was spent on armaments, and how much of it was financed by loans (either out of current savings or out of cash additionally created). Above figures presumably include the cost of party buildings, roads, etc. On the other hand, munitions proper (shells, etc.), are presumably excluded as well as public industrial investment undertaken directly by the State or under compulsion by private firms (such as investment under the four-year plan).

In the first period, moreover, part of the ordinary budget—*i.e.*, the budget deficit (caused primarily by the increase in the cost of unemployment relief)—was also financed by loans. Above table is significant, however, as it shows the mechanism of the recovery in Germany.

[3] In the previous recovery gross investment increased from 8·8 milliards in 1925 to 13·3 milliards in 1928—*i.e.*, 4·5 milliards. National income rose 59·9 milliards to 75·4—*i.e.*, by 15·5 milliards. *Jahrbuch*, 1931, p. 320. The elimination of price movements from these figures is unfortunately almost impossible. The *Statistisches Reichsamt* (*loc. cit.*) gives figures for " real income "—*i.e.*, money

It would appear from these figures that the income used for consumption has increased only by something like Rm. 11 milliards—from about Rm. 47 milliards to about Rm. 58·5 milliards. In 1928 it had been about Rm. 66 milliards. The former figure, moreover, includes a far higher proportion of State "service," including armaments, also financed by taxation, because the Civil Service, etc., has very much expanded. It is rather debatable whether and how far that "service" should be regarded as part of the national "income" in totalitarian countries.

A greater part of German investment, moreover, was made possible in 1928 by loans from abroad, which amounted to not less than Rm. 3·2 milliards. In the five years between 1925 and 1929 the net import of capital was Rm. 2·6 milliards per annum on the average—*i.e.*, almost half as large as the total internal capital accumulation, which is estimated at Rm. 4·9 milliards.[1] Even if we assume that in the absence of reparations payments the corresponding sums would have swollen voluntary savings and not increased consumption[2]—a very optimistic assumption—internal capital accumulation would have amounted to only Rm. 6·6 milliards. In the past few years Germany does not seem to have borrowed abroad, except by running up debts through her clearing agreements, especially with the countries of Central and South-eastern Europe. These amounts could not have been large enough to be significant in the present context. Thus an increase in internal—individual and collective—saving in Germany over the period was much greater than the figures of total net

income statistics corrected on the basis of the cost-of-living index in terms of "1928" marks and in milliards:

1928 = 75·4	1933 = 59·9	1935 = 71·4
1932 = 56·8	1934 = 66·0	1936 = 76·3

In the meantime, of course, the population grew from 64·4 millions to 67·4 millions, and its average age increased. The Saar was, moreover, rejoined to the Reich. Austria is not included in the above figures. The average real income per consuming male adult (women and children being calculated as part-male adults) was still only Rm. 1,371 in 1936, as against Rm. 1,453 in 1928. Unfortunately, the cost-of-living index number, as we shall see below, is open to objections, for both the quality of the goods comprising it has changed and the cost-of-living index includes the most stable of controlled prices. The retail turnover statistics are also somewhat misleading from this point of view. Nor does the index of production give us much help. Considering the further difficulty mentioned above, I decided to use the uncorrected figures, especially as at this stage of the argument the point which must be emphasised is that even the German authorities admit a fall in real income per head in comparison with 1928. An increase in the rate of savings can, under these circumstances, with good reason be attributed to special measures.

[1] Marschak and Lederer, *loc. cit.*

[2] *I.e.*, that the total additional amount raised by taxation for reparations did not reduce consumption.

investment would indicate. If the average of the last few years is contrasted with 1925–29, the discrepancy is even greater.

3. *The Control of Total Demand.*

The statistical data for 1928, the zenith of the previous recovery, should have made it clear at the outset that drastic measures would be necessary if the desired volume of investment was not to provoke a precipitate expansion of general demand leading to inflation. The experience of 1934 shows that at first the Government under-estimated the expansive force of State expenditure. But the methods first evolved to improve and maintain effective demand were later adapted for a repressive control of consumption and private investment.

(a) *Maintenance of Effective Demand.*

In the first period—the work-creation period—the increase in public expenditure was mainly financed by the creation of additional cash. The method used was that of bills of exchange rediscountable at the Reichsbank. Of the total cost of the work creation programme between 1933 and 1935, amounting to Rm. 5,100 millions, some Rm. 3,100 millions came from this source.[1]

This method of financing was continued in the second period (after 1935), and was used both for rearmament purposes and for the execution of the four-year plan of self-sufficiency. Total bill holdings of the German banking system, including the Reichsbank, rose from 10·9 milliards at the end of October 1935 to 15·1 milliards at the end of April 1938. If we assume that the bill holdings outside the banking system did not increase (an assumption which is justified at any rate for the period for which statistics are available),[2] over Rm. 4 milliards must have been obtained by the State in the last two years by this method alone. The volume of bank-notes and bank money consequently increased further, though not to quite as great an extent. Most of the bills were taken up by the Reichsbank and the savings-bank system. The commercial banks increased these holdings relatively little. The *net* increase in the assets of the commercial banks, and even of other institutions in the banking system, veils a liquidation of debts previously incurred and frozen in the depression.

The total amount obtained by the State by the creation of bills may be estimated as between Rm. 8·6 and about Rm. 18

[1] Cf. Grebler, "Work Creation Policy in Germany, 1932–35," *I.L.O. Review*, Vol. XXXV, Nos. 3 and 4, 1937.

[2] Grebler, *op. cit.*, p. 12, and "Germany's Economic Position at the turn of the Year 1936–37," *Reichskreditgesellschaft*, p. 47.

milliards. The two limits are derived by taking the total circulation or merely its *increase* since 1933, according to whether we assume that *all* or *none* of the circulation of private bills has been replaced since 1933 by special bills, and assuming that still only Rm. 3 milliards remain outside the banking system. A further approximation is possible. According to the League of Nations [1] the *Frankfurter Zeitung* [2] estimated the volume of special bills outstanding at the end of 1935 at Rm. 7·5–8·0 milliards. The total volume of bills then amounted to roughly 16 milliards, out of which about 4 milliards were Treasury and Tax-remission bills.[3] Thus roughly Rm. 3–4·5 milliards private bills were at that moment still left in circulation, in comparison with Rm. 9–10 milliards in 1932. The "replacement," therefore, may have amounted to some Rm. 4·5–7 milliards. This estimate is confirmed by an adequate estimate of the position at the end of 1934. The proportion of genuine trade bills still seems to be decreasing.[4] The most plausible estimate of "secret" Debt of the German Government seems about Rm. 13–15 milliards. It must be once more emphasised that all estimates are *lower* limits. As the *Reichskreditgesellschaft* [5] points out, industry may have been forced lately to increase its holdings of bills in order to "mop up" its undivided profits.[6]

TABLE IV.

Position of the Reichsbank. Volume of Money in Circulation.

(In millions Rm.)

	End of February.			
	1929.	1933.	1937.	1938.
Gold and foreign exchange	2,819	921	73	76
Advances, discounts and securities	2,279	3,140	5,438	6,135
Discounts	1,876	2,439	4,777	5,637
Securities	93	401	524	396
Bank-notes	4,553	3,356	4,816	5,278
Deposits	526	402	785	891
Total volume of currency, including token money, etc.	6,195	5,418	6,727	7,219

1 *Money and Banking*, 1937-38, Vol. II, "Commercial and Central Banks," p. 91.

2 December 29, 1935, No. 662.

3 *Konjunkturstatistisches Handbuch*, 1936, p. 139.

4 League of Nations, *loc. cit.*

5 1937, p. 52.

6 The League of Nations (*loc. cit.*) gives two non-German estimates according to which the total circulation of "special" bills increased from Rm. 8·6 milliards to Rm. 12·6 milliards in September 1937. The first figure seems to be too low. The increase, however, seems rather an overestimate. Cf. below the estimate of total Government expenditure.

TABLE V.

Bill Portfolio of the German Banking System.[1]

(In millions Rm.)

	End of April.				
	1928.	1933.	1936.	1937.	1938.
Reichsbank	2,497	3,149	4,424	5,153	5,853
German Golddiscountbank [2]	6	274	750	656	1,004
Konversionskasse	—	—	223·3	373·3	577·3
State Banks	508	663	986	1,091	1,192
Girozentralen	182	341	1,566	1,873	2,134
Savings Banks [3]	287	104	140	221	247
Five Big Banks	2,509	1,699	2,374	3,156	3,037
Twenty other Commercial Banks	495	638	1,140	1,219	1,085
Total	6,481	6,868	11,603	13,742	15,129

(b) *Limitation of Consumption.*

The increase of consumption demand which had to result from this expansion of investment was limited partly by taxation, partly by direct measures.

The ratio of taxation to national income seems to have increased by over 50 per cent. since 1929—from 17·5 to 26·3 per cent. To this must be added the forced saving imposed through compulsory social insurance which has yielded considerable surpluses in the last few years.[4] The bulk of the taxation seems to

[1] In October 1928 total bill circulation amounted to Rm. 12·9 milliards. The amount then held by the banking system was Rm. 6·8 milliards. In October 1932 it was Rm. 10·6 and Rm. 6·6 milliards; in October 1933 Rm. 10·7 and Rm. 7·5; in October 1934, Rm. 13·1 and Rm. 9·5, and in October 1935 Rm. 14·7 and Rm. 11·2, in April 1936, Rm. 15·2 and Rm. 12·2 milliards respectively. The amount of bills outside the banking system shrank from Rm. 6·1 milliards in 1928 to Rm. 4 milliards in 1932 and to Rm. 3·5 milliards in 1935. By the beginning of 1936 it is reported at less than Rm. 3 milliards.

[2] Excluding its own bills.

[3] Treasury bills are shown together with securites.

[4] In 1928 national income was Rm. 75·4 milliards; tax revenue of the Reich, States and Municipalities was Rm. 13·2 milliards; the contributions to unemployment insurance Rm. 0·8 milliards. In 1937 these figures were Rm. 68·5, 18 and 1·6 milliards respectively. Taxation and insurance contributions now amount to 28·6 per cent. of national income, against 18·6 per cent. in 1928. Taxation has increased even in comparison with the low point of the depression. For 1932 the total tax burden is estimated at 25·4 per cent. The *Reichskreditgesellschaft* (1938, p. 74) now estimates it at 29·5 per cent. The increase in the tax yield is mostly due to the buoyancy of revenue and increasing severity of measures against tax evasion. The nominal rates were mostly left at the (very high) levels established during the depression (the rate of the tax on corporations was, however, increased 50 per cent.).

be of a non-progressive, if not regressive nature. It is interesting to contrast the division of income with the division of taxation.

TABLE VI.

Revenue from Taxes and Customs Duties.

(In millions Rm.)

	Financial Year (April 1 to March 31).						
	1928–29.	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.	1937–38.
I. Taxes mainly on property:							
Income tax . .	1,524	543	520	775	1,075	1,584	2,219
Tax on corporations.	608	106	210	320	593	1,047	1,553
Property tax . .	451	330	307	303	303	360	366
Total . .	2,583	979	1,037	1,398	1,971	2,991	4,138
II. Taxes mainly on labour:							
Wage tax . .	1,415	749	730	899	1,362	1,544	1,760
Turnover tax . .	1,000	1,354	1,516	1,873	2,020	2,389	2,754
Excise . . .	1,772	1,518	1,719	2,104	2,229	2,320	2,547
Duties . . .	1,105	1,106	1,065	1,149	1,249	1,333	1,595
Total . .	5,292	4,627	5,030	6,025	6,860	7,586	8,656
III. Rest, not separately enumerated . .	1,150	1,041	779	800	823	915	1,170
Total revenue from taxations and customs . . .	9,025	6,647	6,846	8,223	9,654	11,492	13,964

TABLE VII.

The Distribution of National Income.[1]

(In milliards Rm.)

	1929.	1933.	1934.	1935.	1936.	1937.
Wages and salaries . .	43·0	26·0	29·2	32·2	35·0	39·3
Profit of industry and trade [2]	12·6	6·6	7·9	9·2	10·4	—
Agriculture	5·5	4·2	5·1	5·4	5·5	—
Interest	3·3	2·4	2·6	2·6	2·7	—
Pensions	9·2	8·5	7·8	7·6	7·3	—
Rent	0·9	0·7	0·8	0·8	0·8	—
All private income . .	74·5	48·4	53·4	57·8	61·7	—
Correction for double counting	+1·4	−1·8	−0·7	+0·1	+0·9	—
National income .	75·9	46·6	52·7	57·9	62·6	68·5

The distribution between wages and salaries renders the comparison more favourable to the wage-earners as a class only on

[1] *Reichskreditgesellschaft* (1937–38, p. 41). The item "Wages and Salaries" includes those of Government employees. It is not stated under which item the pay of new State forces (police, etc.) is shown. Pensions include the unemployment benefits, but do not include wages paid out in connection with public works.
[2] Including individual profits.

the surface, considering the amount of the wage tax on the one hand and the very great expansion in employment on the other.

TABLE VIII

Distribution of Salaries and Wages.

(In milliards Rm.)

	1933.	1934.	1935.	1936.	1937.
Wages [1]	12·1	14·6	16·7	18·6	20·9
Salaries of insured employees	5·7	6·3	7·1	8·0	8·9
Other salaries	8·2	8·3	8·4	8·4	8·5
Total	26·0	29·2	32·2	35·0	38·3

There can be little doubt that the taxation was maintained at such a level as not merely to absorb what otherwise would have been voluntary savings, but also to limit any increase in consumption. At the same time, the taxation on higher incomes seems also to have increased substantially. The levy on corporations, which amounted to Rm. 608 millions in 1928–29 and fell to Rm. 106 millions in 1932–33, yielded Rm. 1,553 millions in 1936–37,[2] the yield of the income tax was Rm. 1,523, Rm. 543 and Rm. 2,219 millions respectively. To this must be added " contributions " to party and other purposes (including Winter Help demanding over 400 millions), which are very effectively enforced and which seem to fall heavily on the higher incomes.

Taxation was supplemented by direct measures to prevent the increase in private money demand in addition to the continued expansion of State expenditure from resulting in monetary inflation.

A potential threat to monetary equilibrium was eliminated by the rigid fixing of wage rates. The money-wage bill increased by Rm. 8·7 milliards—from Rm. 12·1 in 1933 to Rm. 20·9 milliards in 1937. But in the case of industrial workers 65·1 per cent. of this increase was accounted for by the increase of employment, and 11·4 per cent. by the lengthening of the working day. Only 13·4 per cent. of the total increase was due to a rise in wage

[1] The gross *industrial* wages bill—before the payment of taxes and contributions—increased from Rm. 5·9 milliards in 1933 to Rm. 10·58 milliards in 1936 and 11·9 milliards in 1937 (excluding the Saar-Territory). Industrial employment increased from 67 in 1933 to 100 in 1936. *Reichskreditgesellschaft* (1938, p. 43) and *Jahrbuch* (1937, p. 340), cf. also below.

[2] The rate of tax was increased from 20 to 30 per cent. in September 1936 *Reichskreditgesellschaft, op. cit.*, 1938, p. 19. It is to be increased further to 35 per cent. in 1938–39 and to 40 per cent. in 1940.

rates, and the remaining 10·1 per cent. was due to the promotion of workers into higher paid categories.[1]

One must not forget, moreover, that the yield of the wage tax and insurance contributions increased considerably: the former from 3·5 per cent. of average earnings to 4·5 per cent., and the latter from 8 per cent. to 9 per cent.[2] The absolute figures are Rm. 1,000 millions from the former, and Rm. 400 millions from the latter. There was also an increase in the surplus of other social insurance funds of Rm. 300 millions. A large part of the increase in other tax revenue was also paid by the worker. There was, moreover, a fall of Rm. 2,400 million in relief expenditure. The net increase in the money income of labour therefore amounts only to something between 3 and 5 milliards—*i.e.*, between 25 and 40 per cent. (whilst employment rose 47 per cent. and working hours 10 per cent.)[3] according to what proportion of the wage tax and insurance contributions we attribute to the working class in contrast to other employees.

A further curtailment of the potential increase of consumption was induced by a strict limitation of dividend payments.[4] Divi-

[1] Institut für Konjunkturforschung, as quoted by *Reichskreditgesellschaft* (1938, p. 43).

[2] The average weekly earnings of German workers, according to *Statistiches Reichsamt* (*Wirtschaft und Statistik*, 1938, p. 159) and the *Reichskreditgesellschaft* (*op. cit.*, 1938, p. 44) increased from Rm. 0·70 per hour in 1933 to Rm. 0·76 in 1937—*i.e.*, 8·5 per cent. (it was 0·96 Rm. in 1929). The weekly pay increased from Rm. 30·7 to Rm. 36·1—*i.e.*, roughly 20 per cent (against Rm. 44·9 in 1929). The deductions from the wage increased from Rm. 3·8 to Rm. 4·9. Thus the net money wage increased only from Rm. 26·9 to Rm. 31·2 (against Rm. 38·6) —*i.e.*, 16 per cent. These statistics seem to contradict somewhat the evidence submitted by the Konjunktur-Institute. In an effort (*Weekly Report*, 10th year, No. 718; (Feb. 24, 1937, Supplement) to refute some unnamed foreign critics, the institute produces figures, according to which the average income of workers and employees (*including* managing directors) increased by 7 per cent. between 1933 and 1936. Considering that very high salaries are included in this calculation, and also considering that tax and other contributions are not excluded, this estimate must be deemed to be incompatible with the above, also official, estimate. The same publication also states that the number of Government employees did not increase during the period (p. 4). It would be interesting to know under which class the increase of the secret and other police, of the staff of the foreign exchange and other economic control institutions, of the Nazi party and semi-military organisations and, above all, of the army (both officers and privates) is carried in these statistics. We shall return below to the social significance of these statistics.

[3] The effects of the price policy will be discussed below, 4 (f).

[4] *Lohnstockgesetz* of 1934. *The League of Nations Monetary Review*, 1937–38, p. 56, rightly points out that this limitation of dividends did not contribute much support to the funding operations: in 1934, *e.g.*, the amount received was only 30 million marks. But apart from preventing share speculation, which the *Review* mentions, it had the important effect of preventing the increase of consumption. It incidentally increased the undivided profits whose use could be controlled directly. Cf. below.

dends were not permitted to be increased above 6 per cent. (in certain cases 8 per cent.), and the surplus had to be handed over to the Government against its long-term obligations.

In spite of these measures there has been a considerable increase in individual voluntary savings, which were mostly kept in the form of deposits. The increase of the volume of savings deposits was roughly Rm. 1,800 millions in 1937, that of the assets of insurance companies Rm. 529 millions. But a further Rm. 1,700 millions of private savings seem to have been available for long-term issues.[1]

(c) *Control over the Capital Market and Private Investment.*

The second, not less important task was to canalise savings into the desired directions, or, in other words, to take care that investment was restricted to projects determined by the State, to control what Mr. Harrod calls the "relation."[2] On the monetary side, the capital market was placed under rigid control.[3] Private capital issues were made subject to Government permission. Much the greater part of all issues consisted of the funding of the Reich.[4] Whereas in 1928 public corporate borrowing did not amount to more than Rm. 663, in contrast to over Rm. 1,600 million private issues, in 1937 the relation was inverse, Rm. 3,150 to less than Rm. 600 millions.[5] Altogether, the gross borrowing of the Government by long-term issues amounted to more than Rm. 11 milliards since the beginning of the fiscal year 1935–36. The amortisation of long-term internal debt was Rm. 1·75 milliards. The total published net borrowing (*i.e.*, excluding

[1] Cf. *Reichskreditgesellschaft.* The last funding loan of Rm. 1,600 million seems to have been subscribed to a considerable extent by investors other than banks.

[2] In so far as munitions are considered in this connection as consumer's goods, and in so far as there was *some* rise in total consumption, it is the "relation" proper. Two qualifications have to be added, however. First, an anticipated rise in consumption may have an "anticipated relation effect." Secondly, some investments may lead to a necessary direct rise in others, and this may be called, with some licence, "investment" relation. These latter were more important in the German case.

[3] For the relevant laws see: *Fünf Jahre Nationalsocialistische Wirtschaftsgesetzgebung Wochenbericht*, No. 12–13, Vol. XI, 1938, Konjunktur-Institute (quoted below, *Fünf Jahre*, etc.).

[4] There seems to be a greater willingness lately to permit the finance of dwelling-houses. Of the Rm. 2,000 millions made available for this purpose (1928 Rm. 2,900 millions) only Rm. 200 (Rm. 1,230) millions were public funds, the rest either private capital Rm. 430 (Rm. 665) millions or institutional savings Rm. 1,135 (Rm. 1,240) millions.

[5] According to the League of Nations (*loc. cit.*) capital issues in 1937 amounted to altogether Rm. 3,595 millions, of which Rm. 2,691 millions were public bond issues, Rm. 724 millions mortgages, Rm. 440 millions (out of which only Rm. 47 millions bonds) private issues.

Special bills), since the inauguration of the regime amounts to well over Rm. $10\frac{1}{2}$ milliards. Of this some Rm. 800 millions have been included in our estimate of short term borrowing.[1] At the same time, the volume of cash flowing into the market was large enough to lift the price of the $4\frac{1}{2}$ per cent. bonds to par against 66·89 in 1932. Most of these long-term bonds were subscribed by the banking and savings-bank system.[2]

Control of the monetary side was supplemented and reinforced by a stringent supervision of actual real investment. The establishment of new companies, the extension of plant, building in practically all important branches of industry, were prohibited. The authorities could grant general and special exemptions.[3] Renewal of plant, which was subsidised in the first period of work creation, is no longer exempt from taxation.[4] Nor does the State direction of corporate savings end there. Through the corporate organisation of industry,[5] individual profits are utilised for a variety of purposes. Some of the burden of export bounties are borne by industries collectively, so as to offset the loss which would have been suffered by exporters as a result of the maintenance of the gold parity. Their earnings are, in certain cases, used to keep down prices of certain goods, especially foodstuffs, to the consumer, in spite of increased prices paid to the producers.[6]

[1] This estimate excludes repayments on the foreign debt. We do not know how much of the shrinkage of the nominal amount outstanding is due to repayment on the one hand and to the depreciation of foreign currencies in terms of gold on the other. A further possibly substantial error may be caused by the fact that amortisation may have been effected by repurchases of obligations below par. The estimate is based on *Jahrbuch* (1937, p. 493) corrected for the issues made in 1937 and 1938. The rate of issues seems to be accelerating, with the increase of national income. In the last half-year Rm. 3·4 milliards were issued. In the wide year 1937 only about Rm. 3 milliards were issued.

[2] The long-term securities of the banking system increased Rm. 6,558 millions between April 1933 and 1938. The increase last year alone was Rm. 2,031 millions. The figure for bills is Rm. 3,866 and Rm. 224 millions. The increase in the security portfolio of the Reichsbank between 1933 and 1938 was roughly Rm. 100 millions, of the savings banks roughly Rm. 4,800 millions. The commercial banks took only Rm. 650 millions; the insurance companies about Rm. 1,000 millions and the social insurance funds about Rm. 1,600 millions. *Reichskreditgesellschaft, op. cit.*, p. 42.

[3] The exceptions, in their turn, were "planned": the lifting of prohibitions being equivalent to stimulus. The foreign exchange supervision agencies represent a further means of control, especially as far as working capital is concerned (stocks of commodities). Cf. *Fünf Jahr*, etc., *op. cit.* and Dr. W. Wilmans *Devisenwirtschaft*, Berlin, 1937.

[4] *Reichskreditgesellschaft, loc. cit.*

[5] A useful description of the institutional means of control is given by Prof. Landenburger, *La Nouvelle Structure Economique de Reich.*

[6] *E.g.*, the burden of increasing the price of rye was shifted on to the sugar industry and breweries (*Reichskreditgesellschaft*, 1937, p. 46).

They are, moreover, obliged to finance a part—estimated at 30 per cent. of the total—of the investment under the four-year plan.[1] Nevertheless some increase has taken place in undistributed profits which can be freely utilised by the entrepreneurs. It has mostly been used to increase working and fixed capital.[2]

(d) *Public Expenditure and Investment.*

We may now venture an estimate of the order of magnitude of the total State expenditure since the beginning of the new regime and more especially in the last two years which were dominated by rearmament.

We have seen that the increase in the bill portfolio of the banking system was roughly Rm. 2 milliards per year in the last two years. This gives us a *lower limit* for this part of the State expenditure, as of course bills outside the banking system may also have increased. Funding issues amounted to almost Rm. 8 milliards, and over Rm. 1·5 of debt was repaid. Total loan expenditure, derived from both long- and short-term credit operations, in the last two years was therefore at least Rm. 10 milliards, or an average of Rm. 5 milliards per annum. It may have been larger. To this there must be added the increase in the yield of taxation over and above what was required for ordinary—*i.e.*, pre-armament—expenditure.[3] According to an

[1] This, incidentally, permits an approximate estimate to the volume of investment under the four-year plan. According to the League of Nations, *Money and Banking 1937–38*, Vol. II, "Commercial and Central Banks," 1937, p. 91, 50 per cent. of these investments were financed by public issues. Total private issues amounted to 591 millions. Little, if any, financing could have been undertaken for projects outside the four-year plan. Thus value of these projects in 1937 seems to have been of the order of magnitude of 1,000–1,200 millions, or about 40 per cent. of the *gross* total capital investment of the whole of industry.

[2] The increase of the capital items of important German limited liability companies in 1934–37 was as follows:

Fifty Limited Liability Companies with a Share Capital of Rm. 2·1 Milliards.	Balance (in millions Rm.) at End of—			
	1934.	1935.	1936.	1937.
Fixed capital *	1,487	1,501	1,480	1,563
Circulating capital *	535	619	631	801
Depreciation	193	211	283	309
Profit	124	148	174	188
Dividends	85	106	120	132

* Balance sheets, probably understating the increase in capital items.

[3] The last pre-Hitler Budget includes about Rm. 700 millions for the defence services. Since then the armed forces have risen from roughly 200,000 to very probably 1¼ million men. It must not be forgotten, however, that the old Reichswehr was a costly long-service army, not a conscripted army.

official statement,[1] the improvement of the budgetary position over the results of the financial year 1932–33—that is to say, the increase in revenue and unemployment insurance contributions and the saving on the cost of unemployment relief —was Rm. 10·1 milliards in the financial year 1937–38. In the previous year this improvement amounted to about Rm. 7 milliards. There had been a net deficit, an increase in the national debt, of about Rm. ½ milliard [2] in the year 1932–33. To this has to be added the deficit due to the burden of unemployment assistance which is said to have been about 2 milliards.[3] The amount which in the absence of rearmament and other new public expenditure would have appeared as true budget-surplus, and could have been used to remit taxation—the amount which thus can be regarded as " collective saving " imposed on the German people—was thus roughly Rm. 4½ and Rm. 7½ milliards in the past two budgetary years respectively. It is still increasing.[4] Thus we arrive at a figure of about Rm. 8·5 and Rm. 13 milliards for total extraordinary Government expenditure in the two financial years 1936–37 and 1937–38 respectively.[5] It is also increasing. This figure includes both extraordinary investment and other additional expenditure. The annual rate of total public (Reich and all its units) expenditure [6] thus seems at present to be in the neighbourhood of Rm. 23–25 milliards—*i.e.*, over 35 per cent.— and public loan expenditure something like Rm. 6–7 milliards— *i.e.*, over 10 per cent. of the national income. These figures, of

[1] *Reichskreditgesellschaft*, 1938, p. 73.

[2] *Konjunkturstatistisches Handbuch*, 1936, p. 161.

[3] This figure is subject to even more doubt. The deficit on unemployment assistance was partly carried by the States and other units of the Reich, partly met by accumulated reserves, partly by other undisclosed borrowing. A detailed analysis is not possible within the scope of this article.

[4] According to the *Economist* (Vol. CXXXII, No. 4954, p. 276), tax revenue in the first quarter of the current financial year amounted to not less than Rm. 3·671 millions, as against Rm. 3·077 millions last year—*i.e.*, an increase of almost 20 per cent.

[5] The significance of these figures can be perhaps better appreciated if it is remembered that the increase in the British armament expenditure is now roughly £270 millions per annum (including the latest supplementary estimates)—*i.e.*, roughly 6 per cent. of the national income. The corresponding German ratio is 17 per cent. In terms of wage units this is perhaps not more than Rm. 4–5 milliards. The increase in Great Britain was, moreover, not accompanied by a change from long-service to conscript army. British public (State and Local) expenditure is not more than 25 per cent. of national income. The deficit is less than 3 per cent.

[6] As no figures for expenditures are published, they have to be estimated by adding to the known statistics of the public revenue the amounts borrowed on short and long term. This may, of course, seriously underestimate total expenditure as neither the non-tax revenue nor the upper limit of borrowing can be ascertained. As a lower limit the figures seem interesting.

course, still under-state the importance of total State *controlled* expenditure and investment, as they exclude the bulk of the cost of the four-year plan and the whole of other, similar, " private " investment.

A further calculation seems possible, but even more precarious than the preceding, as it is more than doubtful whether armament expenditure is included in the estimates of public investment. According to the Institute for Business Cycle Research, this aggregate public gross investment—including investment on all transport—amounted to Rm. 7·6 milliards in 1936. In 1937 it may have been as much as Rm. 8·5. In 1932 public investment is given as Rm. 1·7 milliards. The increase in public investment is therefore roughly Rm. 7 milliards. If we make the doubtful assumption that this figure contains all armaments as well as presumably the increase in the cost of concentration camps, triumphal arches, new roads, canals, Brown Houses and stadia, a further step is possible. Some of the above items are known. Some Rm. 1,000 millions of this increase were used for the upkeep and construction of roads and railways.[1] This would leave for all other Government investment expenditure an average of roughly Rm. 5 milliards per annum,[2] which is disproportionately low in comparison with the total increase. The difference between the two items for total investment and total expenditure —*i.e.*, Rm. 3 milliards—should give the amount which was spent on extraordinary non-investment expenditure (cost of additional administration and defence forces, State subsidies to the Social insurance funds, to the party, Black guards, etc.).

The aggregate extraordinary expenditure since the beginning of 1933 (including civil work creation) thus seems to be somewhere between Rm. 31 and Rm. 42 milliards, according to which hypothesis we accept for estimating total borrowing.[3] The aggregate collective saving amounts to Rm. 12·5 milliards.[4]

[1] The cost of roads in 1935 was Rm. 934 millions, of canals Rm. 135 millions. It is not likely that these items have increased substantially. *Stat. Jahrbuch.*, *op. cit.*, 1936, p. 538. Investment in railways even in 1935 was still less than 50 per cent. of the 1929 peak, and less than in 1934.

[2] The British figure for armament investment is roughly £230 millions.

[3] Mr. Crump arrives on the basis of a somewhat different calculation to limits of between Rm. 10 and 15 milliards per annum. See *op. cit.*, p. 24. Similar figures were quoted in the House of Commons by Mr. Churchill.

[4] *Reichskreditgesellschaft* (1937–38, p. 78) estimates the aggregate improvement in tax revenue and the saving on unemployment relief at Rm. 25·7 milliards. This figure includes the " deficit " for 1932–33 of about Rm. 2·5 milliards. Thus for 5 years Rm. 12·5 milliards must be subtracted. The *Reichskreditgesellschaft* does not make this correction.

It is obvious that these figures cannot claim to be more than a vague indication of the orders of magnitude involved.

4. *The Control of Commodity Markets and of Foreign Trade.*

(*a*) The stabilisation of money wages is the basis (and probably the cause) of the extension of direct control over production and prices. Once money wages were fixed—partly perhaps with the object of spreading public work, but mainly because of the fear of inflation—the control of retail prices became *politically* necessary. At first merely the restriction of the increase in prices was attempted. Step by step the Government were forced to extend regulation over the whole cost structure (the system of the so-called Markt-Ordnung). A useful description of the institutional organisation of these controls is given by Prof. Laufenburger.[1] In vital commodities the market mechanism was partly replaced by rationing. Lately this control has been extended to other elements of cost. Rigid profit margins were fixed instead of proportionate margins, and though the prices of foreign commodities could not be controlled, the impact effect of their fluctuations was restricted to the minimum. The location of industry is now also regulated. We have already mentioned the extension of control on the use of profits and of investment (especially stocks). The problems arising from this ossification of the price and cost structure, the question of a "just price" and their effect on efficiency and adaptability of the economic structure, cannot be discussed here.

(*b*) As a result of these controls price movements were very much smaller in Germany than abroad[2] (apart from an initial rise in the agricultural price level).[3]

[1] *Op. cit.* See also *Fünf Jahr*, etc., *op. cit.* [2] See Table I.

[3] The prosperity of agriculture seems to have been one of the principal aims of the régime ("Blut und Boden"). The agricultural output has not increased more than 10 per cent. since 1932–33:

1927–28–1928–29	100	1934–35	115
1931–32	108	1935–36	110
1932–33	104	1936–37	113
1933–34	110		

in spite of the increase in agricultural prices from 60·9 in April 1933 to 78·7 in April 1938—*i.e.*, by roughly 30 per cent. (1928 = 100), and very considerable (last year over Rm. 1 milliard) investments and the supply of additional labour. Some of the increase in agricultural prices which raised the net money receipts, including wages of agriculture, from 1·6 to 3·7 milliards and the income of landowners from 300 to 2,100 millions was borne not by the consumer, but by industry and by rationalisation of distribution. But it is more than probable that the index of retail food prices, which shows only an 11·6 per cent. rise in the same period, understates the price movement. The desire to achieve self-sufficiency in bulk-foodstuffs favoured the great landowners.

Wholesale prices of manufactures rose only from 70·2 to 79·4 (1928 = 100) between April 1933 and 1938. This rise veils two opposite movements. The price of capital goods fell by 1 per cent., from 83·3 to 82·5. The wholesale price of consumption goods rose by 24·4 per cent. from 62·4 to 77·6. If we contrast this with the opposite movement in the rate of production of capital and consumption goods, the complete control of the Government over production becomes apparent.

(*c*) The cost-of-living index rose from 76·4 in 1933 to 82·8 in 1938. Most of this rise is due to clothing—which increased from 62·0 to 76, and is still rising—and to food (71·6–79·9) (1928 = 100). This index does not, however, reveal the whole picture. The controlling authorities now force an admixture of poor-quality substitutes with raw-materials which have to be imported from abroad.[1]

(*d*) The supply of labour was artificially diminished in the first period; this policy had to be reversed, as labour became scarce. The restrictions on the freedom of domicile[2] and work, which had been improved in the time of unemployment, was used to increase the labour supply over and above the natural addition to the number of people of working age. According to the Institute for Business Cycle Research,[3] between August 1936 and 1937 there was an increase of 470,000 workers over and above the increase due to the normal growth of the population. Some 200,000 women were newly employed (there is no ban on married women working) and 170,000 men were recruited from other occupations.[4] The control of investment, moreover, was supplemented by a control of the employment of skilled labour.

(*e*) The increase in total demand resulted in a reversal of the favourable balance of trade. The control of foreign transactions, which under Brüning served almost exclusively to prevent a flight of capital, began to be used for conscious management of foreign trade. In her economic relations with foreign countries

[1] In the textile industry the relation of imports to the production of substitutes changed considerably.

[2] Agricultural labour was forbidden to take work in towns and was sent back, etc. See *Fünf Jahre*, etc., *op. cit.*, p. 3. The proportion of women in industry was then reduced from 29·3 per cent. in 1933 to 24·7 per cent. in 1936. See *Stat. Jahrbuch*, *op. cit.*, 1937, p. 344.

[3] *Halbjahrsberichte zur Wirtschaftslage*, Vol. 13, No. 1, 1938, p. 9.

[4] A strong pressure is exerted on small middlemen and handicraftsmen to give up their independence and increase the supply of skilled labour. But apart from these forceful measures, much educational effort has been used and the mobility of labour increased. Great care is taken to prevent juveniles from entering dead-end occupations. The Commissioner is empowered to conscript labour and is using this power energetically.

Germany was very much helped by the depreciation of currencies in terms of gold and of commodities, and the increasing lethargy of the foreign creditors in face of a debt moratorium which assumed more and more the character of a partial default. The burden of the foreign debt decreased from about Rm. 1,426–1,674 millions [1] in 1931 to Rm. 250 millions in 1937.[2] This freed considerable productive forces for internal development.

But the German foreign exchange policy must only be discussed here in so far as its influence on the control of investment and the level of consumption is concerned. Whilst nominally remaining on the pre-crisis gold-parity, German foreign trade is now partly conducted on a pure barter basis, partly by way of export bounties; or equivalent arrangements—*i.e.*, selective depreciation—the cost of which is imposed either on industry [3] or on foreign creditors or on Jews desirous to export their capital. This control of foreign commercial exchange transaction became the fulcrum of the central control of all important primary commodities. At the same time the inevitable red tape and the uncertainty about the final aims of these measures led to much confusion and caused frictions (deterioration of quality), which in time impeded exports.[4] Detailed statistics show that Germany used the relatively more favourable international export position she attained since 1935 not so much to lessen the frictions in the export consumption sphere as to increase her imports of raw materials needed for armaments and cognate purposes. These are now far above the 1928 level.[5] The increase in State expenditure meant not merely an increase in the demand for certain raw materials, whilst the demand exerted before was hardly diminished, but also the decrease of potential exports. As long as there was unused productive capacity this consideration was not of overwhelming importance, both because the increase in State expenditure could be accommodated as an *addition* to total output, and because this was relatively easy to accomplish. Most of the difficulties in German trade could even then be attributed to the strain which was caused by the feverish rate of increase in State expenditure.

(*f*) These considerations enable us to give some account of the development of the real income of the working class. We have

[1] *BIS. Report of the Special Advisory Committee*, Basle, Dec. 1931.

[2] *Reichskreditgesellschaft, op. cit.*, 1937–38, p. 88.

[3] Cf. § 3 (*c*), above.

[4] *Reichskreditgesellschaft, op. cit.*, 1937–38, p. 37.

[5] See de Feis, "Raw Materials and Foreign Policy," *Foreign Affairs*, New York, July 1938, p. 579.

K K 2

seen that some doubt exists whether the increase in its *net* money receipts was not smaller after taxes were paid than the increase in employment, and that therefore *net* money receipts *per head employed* did not decrease. Employment had increased from an average of 12·5 millions in 1932 to an average of 18·4 millions in 1937. It is now over 20 millions, excluding the defence forces and Government employees. An additional source of uncertainty is introduced by the fact that we do not know whether the pay of the latter is included in the wage statistics. If we take the income per head of employed and unemployed together, we may say that there was some increase in income per family. There was, however, an increase of roughly 10 per cent. in numbers employed over and above these previously unemployed. The rise in the cost of living was, according to official statistics, 8·9 per cent. between 1933 and the beginning of 1938. The increase in consuming power per worker (employed and unemployed) is somewhere between 7 and 17 per cent. This does not take into account the very considerable deterioration of the quality of certain goods. In so far as this can in some instances be offset by increased domestic work (mending of bad quality cloths), it need not imply a fall of consuming power proportionate to worsening of quality. The measures against waste also tend to maintain consumption at a smaller cost. The worker, on the other hand, benefited by a paid holiday and cheap facilities for the " approved " enjoyment of leisure. Indeed, this device was used consciously to shift consumption towards directions where the supply was, or could be made, elastic (*Konsumlenkung*) and avoid as much as possible the necessity for direct rationing action. If the price policy for agrarian goods and protective tariff militated against the low-income classes, the policy of rationing vital commodities and stabilising their prices made the distribution of available consumption goods more even. The complete prohibition of foreign travel and of the import of heavy goods had similar effects. Nor must it be forgotten that " voluntary " contributions were enforced on the rich, and part of their individual profits was used for public purposes. The distribution between classes of the (relative) burden of rearmament and autarchy is less regressive than the above statistics would suggest.

A certain satisfaction—how long it will last is uncertain, considering the increasing strain of long working hours and the new feeling of insecurity arising out of the threat of being conscripted to work far away from home—is derived by the worker

from the fact that employment is stable. And Germans seem to enjoy the feeling of national greatness and value personal liberty and legal security, as it would appear, less.

5. *The Working of the System.*

We may now sum up the results and implications of our statistical survey and try to give an account of the working of the system.

(*a*) A very considerable reserve of unemployed productive power was available in Germany at the beginning of the new régime, as a result of the preceding extreme deflationary policy. It is fallacious to suggest, therefore, that the whole cost of militarisation has been borne wholly or largely by the population being deprived of part of their real income which they actually enjoyed when the democratic system fell. The re-employment of this reserve of productive power went far to offset any loss in real income caused by the increase in costs due to determination to become independent of foreign supplies in essential raw materials and to support a very considerable rearmament programme. The success of the German Government in mobilising the unemployed productive capacity of the country was, moreover, helped by the fact that productivity (returns per head) was bound to increase in many industries with increasing employment. But with capital and labour fully employed in essential industries, returns have begun to fall (*e.g.*, in coal and iron ore mining) and are likely to fall further if the present policy is intensified either in the direction of increased barren investment or increased autarchy.[1]

(*b*) The method actually used to increase employment was to increase public investment. Inflation was prevented by limiting the automatic expansion of consumption and private investment consequent to this expansion—or, in other words, to enforce increased collective and individual saving whilst limiting private investment. It would not be quite accurate to say that this very high rate of investment in relation to total income has been achieved at the cost of the wage-earning and salaried classes and by way of inducing a shift towards the profits of the big cor-

[1] Germany, moreover, was able to draw after 1932 on her accumulated stock of working capital. According to the *Reichskreditgesellschaft* (*op. cit.*, 1936–37, p. 54), these stocks were valued at not less than Rm. 27 milliards at the beginning of the crisis in 1929. Even in 1932 they were Rm. 20 milliards, and most of the shrinkage was due to the fall in prices. The measures against waste and the limitation of stock had identical effects. These measures can hardly be repeated.

porations.[1] The actual distribution of sacrifice, however, as we have seen, was somewhat fairer than is indicated by the statistics.

(c) The initial and primary means of financing public investment was through the creation of cash by drawing bills of exchange rediscountable at the Reichsbank. As a result of the additional loan expenditure employment, there was a rise in national income and tax revenue. The increased buoyancy of revenue was not used to remit taxation, but to increase State expenditure further—which to that extent became an *alternative*, instead of being an additional expenditure. When voluntary savings began to increase—in spite of the drastic measures of taxation—they were also used to finance Government expenditure or such private investment as the Government desired.[2]

During the deflation period cash reserves (income, business and precautionary deposits) had been depleted. The cash created by the Reichsbank therefore was available to replenish these reserves; so that there was no need for a rise in the velocity of circulation or in the short-term rate of interest, due to the rise in incomes. The short-term market rate of interest declined from 4·18 per cent. in 1932 to below 3 per cent. It is now 2·67 per cent.[3]

The emergence of excessive cash reserves is prevented by a peculiar form of market operations. These take the form of a sale by the Golddiscountbank (a subsidiary of the Reichsbank) of its own bills (*Solawechsel*) to the commercial banks and the use of the proceeds to buy Government bills rediscounted at the Reichsbank.[4]

[1] This seems to be the interpretation of Prof. Laufenburger, *op. cit.*, p. 27. It is true that the high profits associated with full employment would have tended to increase money wages in the absence of Government regulation. The increase in money wages, however, would have resulted in a cumulative inflationary process. After its inevitable breakdown, labour would have been thrown out of work. Thus, in so far as the regulation of wage rates is an essential condition for the steady maintenance of full employment, the limitation of wage rates may not over a longer period represent a fall in the average earnings of labour in comparison with a free system. This does not mean that the standard of life could not have been raised in the absence of rearmament and autarchy.

[2] This policy may seem contradictory to those who still regard the loan expenditure of the German Government as a means rather than an end. On the one hand, the State indulges in loan expenditure. On the other, it prevents this loan expenditure from having the desired monetary effect. Full employment, it may be argued, could have been reached without the State continuing to increase its debt. If we remember, however, that the aim of the Government was to achieve its maximum activity in a certain desired *direction*, the method applied becomes intelligible.

[3] *League of Nations Bulletin*, 1938, No. 7, p. 348.

[4] The volume of these Solawechsel fluctuated between Rm. 30 and Rm. 1,240 millions in the last years. After each funding operation it diminished. *B.I.S. Report*, 1937–38, p. 81.

This procedure is similar to the policy adopted in England during the War of paying interest on bankers' balances. It reduces the cash reserves of the other banks.[1]

It is obvious that further creation of cash will be necessary with the normal growth requirements resulting from the continued expansion of the economic system. It is irrelevant whether this will take the form of credits to industry rather than to the Government, though in the former case frictions may develop, as lending to industry might be considered by the banks (though without any real reason, as long as the present system continues), riskier than investing in short-term Government securities. After full employment is reached, and if the Government does not choose to utilise the powers of control at its disposal, the rate of creation of cash will have to slow down if price movements are to be avoided. These powers (over the capital market, including undivided profits, as well as over both wage rates and the private employment of labour, together with taxation and possibly rationing) are amply sufficient, not only to prevent any undesired rise in demand—*i.e.*, velocity of circulation—but even to depress it further—*i.e.*, enforce hoarding. Therefore, provided only State Loan expenditure at full employment is kept within the capacity of the productive system—having due regard to the permitted level of consumption and private investment—no danger can arise even if the whole of the public-loan expenditure is financed by the issue of bills and the creation of cash.[2]

[1] A similar mechanism was used successfully by Germany during the World War. In spite of the fact that she covered a far smaller part of her war expenditure by taxation than England, price inflation in Germany was small until the end of 1917 because the increase in the volume of cash, and thus of effective private demand for commodities, was successfully kept in check by funding operations. Cf. Graham, *Exchange, Prices and Production in Hyper-inflation Germany*, p. 25, and Bowley, *Prices and Wages in the United Kingdom, 1919–20*.

[2] It is comprehensible that Dr. Schacht still asserts on every occasion that financing through the issue of bonds is "sounder" than through the drawing of bills. As the German savings are mostly held in the form of deposits, both bills and securities have to be bought by the banking system. The "soundness" of financing depends, therefore, on whether the owner of saving deposits does not suddenly decide to dissave, to spend these deposits, for in that case an additional money demand for goods—*i.e.*, monetary inflation at full employment will originate. If the Government, then, is not prepared to restrict credit in general —*i.e.*, let the rate of interest rise, it must prevent that potential additional demand, that command over goods stored up in previous periods, from becoming effective in the present. This is what happened after 1918, and what produced the amazing increase of the velocity of circulation. If up till 1918 inflation lagged behind the creation of cash, after that it left it far behind. This cannot be prevented except by direct control, unless a forced funding is decreed, because the greater part of German investors do not seem to be willing to part with their

Provided this condition is fulfilled the form of financing is immaterial.

The sterilisation of excess balances by open-market operations, the sale of assets, acquired by the Reich during the depression or lately confiscated, to private investors—an operation which has the same effect in " sterilising " previously created cash—are not essential, *technically*, for the smooth working of the Nazi system. They are important—very important—*socially* only. These measures and the insistence on the necessity for voluntary saving and for financing through the issue of funding loans placed, as much as possible, directly with investors, obviate the necessity of utilising fully the coercive powers at the disposal of the Government and safeguard as much as possible what remains of the individualistic system based on private property. The alternative policy would imply increasing control and nationalisation. Yet, however skilfully the former policy is conducted, the question at issue—the question whether a quasi-Socialistic policy will not have to be decided upon—depends on whether the Conservatives will be able to restrain public expenditure from increasing beyond the limit imposed by the available productive factors, whether therefore new limitations will not have to be imposed on private consumption and investment. If we take into account the architectural plans and the further extensions of rearmament already announced, some doubt must arise whether the tug-of-war for the available labour supply, which is the real equivalent of inflation in this controlled system, will not increase. It will find its expression not in price movements so much as in frictions and shortages in the production process.[1]

deposits (though the last big funding was, to some extent, subscribed directly). Thus we may say that the " soundness " of the German system from a monetary point of view depends entirely on the tightness of control over the capital and investment markets, and on the efficiency of its control over consumption, thus, even in this field, on the efficiency of discriminative price control. The task fundamentally is not that the purchasing power must not be created, but that, irrespective of the rate of interest, total investment should not rise above limits set by the productive capacity of the country.

[1] The discontinuance of the issue of bills may possibly help to enforce economy. The " new " financing policy, as far as one can make out, involves the issue of non-rediscountable short-term obligations of the Reich, which then are funded by periodic long-term loan issues. As the banks have sufficient rediscountable material; as, moreover, the Reichsbank has recently been empowered to conduct open-market operations, this change in finance is not a safeguard against the frictions which we have described above. One must bear in mind, however, that these frictions will not lead to cumulative processes, and that therefore, though they might be irksome to the entrepreneurs and to those opposed to the extension of controls, they do not imply a fatal threat to the system.

(*d*) The control of total demand by the control of consumption and private investment was supplemented by direct control of production through a regulation of prices, supplies and thus of profit margins. The regulation of wages and salaries was the basis of both measures. It is interesting to note that despite these irksome regulations, the high rate of taxation and other measures restricting the use of profits, private activity was maintained at the maximum level permitted by the State throughout this period. This is all the more remarkable considering that in other countries—*e.g.*, in France—State loan expenditure was of almost the same order of magnitude relatively to the national income, interference with entrepreneurs was very much less and yet it failed to achieve this result. Some tentative suggestions may be offered in explanation:

(i) There is practically no possibility of disinvestment in Germany by capital export. Hence it is all but certain, to say the least, that the strict control of foreign exchange transactions, which is backed by extremely harsh penalties, was a *sine qua non* of success.

(ii) It is probable that the regulation of practically all markets, prices and costs, in conjunction with the steady flow of Government orders, has virtually eliminated risk. Hence the entrepreneurs are reconciled to a relatively low rate of profit available at their free disposal. The maximum of 6 per cent. therefore seems increasingly to be regarded as a guaranteed minimum as well.[1]

(iii) The existence of State-directed private investment on a large scale, under the four-year self-sufficiency plan. It is probable that the *rate* of investment undertaken by individual firms under the plan is more or less dictated by the Government, and considerations of individual profitability have little to do with it. It is not quite clear, but it is probable, that the profitability of these investments will also be ensured by appropriate measures taken by the controlling authorities.

[1] There seems to have been also some possibility of charging private outlay as expenses despite the increasing tightening of the tax system.

There is a danger that this transformation of the trader and entrepreneur into what are virtually mere agents of the Government, will in due course result in their disappearance. They are now given substantial incomes without performing any functions such as risk bearing. This discrepancy between performance and reward is increasingly realised and resented by the "Left" wing of the party.

At the same time, the maintenance, as yet, of the titles to, if not of the right of free disposal over (and unrestricted enjoyment of the fruits of) property—except in the case of certain persecuted minorities, including certain foreigners—seems to have created both at home and abroad an atmosphere favourable to the regime.

(iv) The existence of an administrative penal system must have been a very powerful method of preventing any sabotage by entrepreneurs, even if at times purely economic considerations would have suggested a decrease of their scale of operations and investment.[1]

The effectiveness of some of these factors (especially the second) would seem to depend on continuation of State investment at the present rate, or else in a controlled increase of consumption. But where the State has such effective means at its disposal for regulating the level of consumption, the problem of an insufficiency in the marginal efficiency of capital for *private* investment need not arise within wide limit. Indeed—as we have seen—the danger at present is in the opposite direction, and special measures are necessary to prevent a runaway inflation.

(*e*) Incidentally the high rate of investment resulted in a process of far-reaching change in Germany's productive structure. Industries producing capital goods are fully employed, and a considerable shortage of labour exists there. Productive capacity in the investment-goods industries is being enlarged. But capacity in consumption-goods industries is not fully employed, and it is even doubtful whether in some of these industries capacity is maintained. At the same time, new industries for the production of substitute raw materials are being built.[2] A considerable transference of labour to the production-goods industries is also proceeding.

(*f*) The control of foreign trade and foreign exchange transactions has several functions essential to the working of the whole system : (i) it prevents disinvestment by export of capital; (ii) it enables the authorities to control all production and all consumption needing foreign imports. This permits a discriminating

[1] Incidentally the " courts of honour " established to supervise entrepreneurs seem to have the function of ensuring the maintenance of efficiency despite the abolition of the profit motive and the free-market mechanism as an incentive. In the longer run, however, this method may not be very effective.

[2] According to the Statistical Board, only 65·1 per cent of the exising productive capacity of the textile and 54·5 per cent. of that of the garment industry, was in use. Unfortunately no recent estimates are available for *net* investment in individual industries. A rough calculation, however, is possible. The rate of gross investment was Rm. 415 millions in the consumers'-goods industries in 1935. This is less than 50 per cent. of the rate of investment of 1928 and about 45 per cent. less than in 1927. Gross investment in the capital-goods industries was at Rm. 1,243 millions only 25 per cent. less than in the exceptional year 1928 and roughly 10 per cent less than in 1927. The net fixed investments in consumption- and capital-goods industries together were Rm. 800 millions in 1928, about 1,100 millions in 1927. This seems to indicate a disinvestment of, say, 100–200 millions in the consumption-goods industries for 1935. To this has to be added, however, investment in the industries producing substitute materials for consumption under the four-year plan.

pricing policy which enables the maintenance of high national income by directly regulating the propensity to consume foreign goods relatively to the demand for German exports; (iii) it provides a complete control of both imports and exports, so as to maintain full employment internally, irrespective of the state of trade abroad. The risks attached to individual export industries are not borne by those industries alone, but by the whole or part of the economic system—*i.e.*, profitable employment of those industries can be, if the Government so desired, assured by bounties, and other special arrangements. A reduction in foreign demand would find its expression not in the unemployment of industry, but in a worsening of the terms of trade (*i.e.*, the maintenance of the value of exports through increasing the levies financing exports). Thus cumulative processes due to foreign fluctuations (the operation of the so-called foreign trade multiplier) can be prevented.

But the present policy of maximum autarky and some reduction of imports for consumption is not an essential ingredient of this system. It is the consequence of military and strategic considerations. Provided the control of foreign trade is maintained, the system could within wide limits be worked also with more international division of labour and permitting an increase in consumption.[1]

[1] The problem involved in the control of foreign trade, especially the possibility of improving the terms of trade by appropriate use of the imperfections of world markets, cannot be discussed here. The final judgment on the advantages and disadvantages of a control of this character, therefore, cannot be based merely on the static theory of international trade. It must take into account both the possibility of shifting terms of trade by utilising the imperfections of competition (especially buyer's monopoly), and the fact that the stifling of the foreign trade multiplier increases the average national real income over a period in contrast to economic systems liable to cyclical fluctuations. It must, on the other hand, take into account the cost of administration and the waste and lost opportunities due to the red tape and inelasticity of such controls.

The German desire for autarky, however, would, economically, only be justified if the elasticity of demand for German products would be less than unity. Otherwise, though a greater reliance on international trade would probably imply greater fluctuations in the terms of trade, yet the advantages of international exchange would in all likelihood be greater than the loss caused thereby. And as long as control is maintained, full employment, as we have seen, can also be maintained. It is not possible, in this context, to investigate whether the demand for German goods is inelastic or rigid. Considering the prevalence of quotas, it may well be both. On the other hand, clearing arrangements and the fact that Germany produces manufactured goods and demands and needs raw materials and foodstuffs, tend to justify the presumption that she could gain by increasing foreign trade. The lack of success of her clearing arrangements, especially with South America, has been, it seems, due to political frictions engendered by her peculiar management of clearing arrangements. The advertised relaxation of foreign exchange control merely involves the elimination of frictions in her export trade, but does not weaken the control itself.

6. *Problems Concerning the Future.*

As regards the future, two final problems may be considered. First, can this method of securing full employment be pursued indefinitely? Second, must this mean that investment should largely take the form of creating goods which yield no material return; or would it be possible to increase consumption (and such investment as is necessary for this) without losing the balance now maintained? Only the first question can be answered in the affirmative without any further qualification. The answer to the second is not simple, though I believe that methods can be devised to achieve a solution. But quite apart from the fact that there does not seem to be any willingness in Germany to change the present policy, the true character of the German system reveals itself, and its weakness becomes apparent, in this connection. As a planned system its basic advantages seem to evaporate to a large extent when the task is no longer the use of all available reserves for a pre-determined aim, namely, the rationing of scarcity, but for the satisfaction of the free choice of the individual, namely, the promotion of plenty. The Nazi economic policy is better suited for achieving maximum employment than for securing maximum enjoyment.

(*a*) As we have seen, by far the greatest part of investment is effected irrespective of its *own* economic yield and the rate of interest ruling. In fact, most of it has no economic yield in the normal sense of the word. There is no limit, obviously, to such investment.[1] The end of the building of one layer of the Cheops pyramid can always be followed by yet another layer. The marginal efficiency of all other investment is stabilised by this public investment. At the same time, State and State-controlled loan-expenditure must continue at a rate great enough to absorb all voluntary saving not utilised by other investment, if full employment is to be maintained. The argument that at a given point taxation will be " sufficient " to " carry " all State expenditure disregards the essential part of the mechanism of the present

[1] If Germans plead that they must have colonies because there is " a limit to the internal capital development of Germany," that is very special pleading, and need not be taken too literally. Nobody doubts that the presentation of one or two gold, nickel or tungsten mines, with docile labour, would increase German productivity. It is not at all certain, however, that that increase would be permitted to raise the standard of life, and not be diverted to other, less laudable purposes. Even Dr. Reinhardt, the Secretary of State in the Ministry of Finance (*Germany Speaks*, p. 131), assigns rearmament a more fundamental place than do some foreign commentators—*e.g.*, Mr. Crump, who seems to think that " in a sense rearmament *grew* out of the original concept of creating work."

system. State loan expenditure can be discontinued only in so far as it is replaced by increased private investment,[1] or the present rate of voluntary individual savings is reduced by taxation.[2]

It is often suggested that difficulties in financing will lead to a breakdown of this system or, conversely, that it is likely to lead to inflation. We have seen that as long as loan expenditure is kept within the limits of enforced and voluntary individual saving, it cannot lead to a cumulative inflation, *however financed*.[3] The opposite suggestion is equally erroneous. Resistance on the part of investors cannot obstruct the Government. Disinvestment by export of capital is impossible. Nor is flight into commodities or other "real" assets practicable. All that the investor can do is to depress the rate of interest on non-Government assets below the rate of interest on Government securities. But the strict control of new issues and of building activity is sufficient to prevent private investment from becoming competitive with public investment. The private investor may, of course, express his disinclination to invest by increasing his cash reserves. In that case, however, the Government can offset this hoarding by financing its requirements to a greater extent through rediscounting at the Reichsbank. The institutional pools of saving (insurance companies, social insurance funds and banking system) are under direct control, and cannot hold out for higher rates of interest. It is only in the sphere of consumption and public investment, as we have pointed out, that there are certain dangers. The insistence on the necessity of increasing voluntary savings (the multiplier seems to have risen in 1937), together with the increased taxation and the efforts to limit a further expansion of State expenditure, show clearly Dr. Schacht's evaluation of the position. It is yet to be seen whether he will be successful without further extension of controls.

The increase of the burden of the debt contracted for purposes which are not "self-supporting" may be thought to impose a time limit on this policy.[4] As long as full employment did not prevail, this consideration had little relevance to the German case: the increase of the national income and the consequent buoyancy of revenue were more than sufficient to carry the additional interest burden. But now that full employment has been

[1] Cf. below under (*b*).

[2] The Budget surplus may be regarded as collective saving.

[3] See p. 485.

[4] This problem has recently once more received full attention in the discussion on the last British Budget. Cf. Prof. Robbins, "The Long Term Budget Problem," *Lloyds Bank Review*, April 1938.

reached, the position is somewhat different. If the present rate of barren loan expenditure is continued, the service of the debt burden will rise, whilst revenue will not expand automatically.[1]

There are several reasons why this factor need not be effective. Given the present rate of loan expenditure, the yearly increase in the debt burden is Rm. 6 milliards. Assuming that most of it will be obtained by long-term issues at $4\frac{1}{2}$ per cent., the yearly increase in debt burden is about 2 per cent. of the present Reich revenue. It must not be forgotten, however, first, that the funded portion of the German national debt still bears a relatively high rate of interest ($4\frac{1}{2}$ per cent.), which could easily be reduced.[2] 1 per cent. reduction of the rate of interest on the present internal post-War debt would alleviate the total burden by something like Rm. 150 millions. The burden of the yearly additions to the debt burden would be reduced thereby by more than Rm. 60 millions.

Secondly, a high debt burden has a detrimental effect on the economic system only if the consequential additional taxation depresses the marginal efficiency of capital. Otherwise it is a mere transfer of purchasing power, with no effect on the scale of activity. Now, even in a free system it may be possible to devise forms of taxation which have no depressing effect on the inducement to invest,[3] and to alter existing taxation so as to favour risk bearing. In Germany, as we have seen, the bulk of investment—*i.e.*, State investment and State-controlled private investment—is not dependent on the profit incentive. And even a large part of private investment, as a combined result of State investment and control, is relatively "riskless," so that a considerable reduction in the net yield (on account of taxation) has not resulted and should not result in a refusal to invest.

The third reason is, that given the scale of State expenditure and the amount of productive factors, and hence, at full employment, the permissible level of consumption and private investment, there is no necessity for the State expenditure to be covered by borrowing. The problem could theoretically be solved by reducing voluntary saving by taxation to the level of private investment. A high rate of taxation need not, in the German system, as we have argued above, have a depressing effect on the level of private investment. The successive increases of the rate of the tax on corporations tends to show that the German

[1] See for certain qualification below, p. 493.

[2] In practice these considerations are reinforced by the fact that the German debt was relatively small at the beginning of the new régime.

[3] Cf. Kalecki, Economic Journal, Sept. 1937.

authorities may be aware of this possibility. Considering, however, that consumption cannot be permitted to rise as long as the present policy is followed; considering, moreover, that it is politically impossible to reduce incomes sufficiently all round to wipe out all voluntary saving above the very reduced level now required for private investment, this method does not seem sufficient. In conjunction, however, with the other expedients, it may well provide the solution.

Fourthly, national income, even with the present investment structure, is likely to increase; and, as we have seen, the increase necessary to carry the growing burden of the public debt at the present scale of borrowing, by way of increasing buoyancy of the revenue, is only about $1\frac{1}{2}$ to 2 per cent. per annum. This rate of increase is not beyond the bounds of possibility, for (i) the birth-rate appears to be well maintained and there still are latent labour reserves (women, etc.) which can be tapped; (ii) the net investment in industry as a whole for other than rearmament purposes is still positive rather than negative, and could be increased. Any increase in net private investment, however, would mitigate the problem both by reducing the size of necessary Government loan expenditure and by promoting a higher rate of real income; (iii) the progress of technical inventions, apart from the effect of the elimination—for political reasons—of many able experts, is likely to be speeded up by the system of central control. Contributions to research can be enforced, and any discovery more quickly and generally applied than in a competitive system (where the risk-element is much greater). On the other side, the weakening of the profit incentive, and the influence of the political atmosphere on inventive genius, must have a retarding effect the quantitative importance of which would be difficult to estimate.

(*b*) The second problem is whether Germany could substitute for that greater part of total investment which now yields no direct economic return, productive investment and an increase in consumption. This problem has two aspects, an internal and an international one.

We have seen that the German productive structure is in the midst of a process of readjustment. Once that readjustment of both capital equipment and available skilled labour to the present division of demand between consumers' and producers' goods is accomplished, it will be very difficult to bring about a speedy reversal of the present policy without causing considerable unsettlement. Even at the present juncture a reversal would involve certain difficulties. Unused capacity of capital equipment

exists in the consumption-goods industries. Hence an increase of consumption would not lead to investment additional in these industries on a considerable scale for some time to come. Thus, an increase in consumption demand could not compensate for a falling off of rearmament expenditure and of investment under the four-year plan, from the point of view of the investment-goods industries.[1] Additional complications[2] are likely if an attempt is made to substitute an increase in consumption for barren investment. Now, producers' goods industries are fully employed by direct orders of the State and by State-controlled private investment. As we have seen, under these circumstances there is no risk involved in production, thus, in investment. The consumers' goods industries, on the other hand, know that their—severely restricted—output will find ready buyers. If the individual consumers' desires should re-emerge as the main determinant of production, the problem of adjustment will pose identical problems in Germany as elsewhere. Risk will once more dominate business activity, and it is difficult to see why the problem of stabilising effective demand should differ in this system from the identical problem in free systems, except, perhaps, that the complications arising from fluctuations abroad and from the possibility of disinvesting by exporting capital can even then be prevented. But the *specific* advantages of the German system seem to diminish once its aim is changed from war preparation to the provision of an increased standard of life.[3]

The transition from a controlled war economy to a planned

[1] It is conceivable that the international outlet could provide a solution: the producers' goods could be exported in exchange for consumers' goods. See below.

[2] I am indebted for this point to Dr. Burchardt at Oxford.

[3] Even if total demand is well maintained, investment in consumption goods industries is more risky on account of uncertainty concerning the future demand for any *particular* consumers' goods.

These complications would not arise, perhaps, if armaments investment is substituted by an increase of building activity (especially dwelling-houses) or railroad equipment. Yet it is questionable whether enough scope exists in that direction, and whether, if they tried this solution, there would be no frictions in the over-extended heavy industries. The risk element could also be eliminated, despite an increase in the standard of life, if this increase took the form of free social services, including possibly the free distribution of certain consumers' goods. An attempt could also be made to "pool" internal risks on the lines of the export industry. Considerable scope exists, therefore, for a reorientation of German policy. But there seems to be no reason why similar measures and similar institutional devices should not be established in free economic systems and, in conjunction with public works and other expedients limiting the fluctuations in effective demand, achieve identical success. The present seeming supremacy of the totalitarian States in dealing with cyclical fluctuations would then disappear. This seeming supremacy, which is increased by the reluctance in the free countries to deal rationally with cyclical fluctuations, must be regarded as a grave political menace.

peace system seems to be very difficult. Indeed, even the cessation of further expansion of productive capacity in the armaments industries will involve some frictions. The effect of these frictions, however, could be at any rate limited by the central control; they need not involve a wide deflationary process. Thus there appears to be no internal economic necessity for the continuation of the present investment policy, though it is to be feared that vested interests are being created which will strongly oppose a change. Indeed, the fact that, far from contemplating any such readjustment, the transfer of labour and capital from consumption continues,[1] makes it improbable that the Government contemplates a falling off in the scale of rearmament in the near future. If they contemplated a shift towards higher consumption, they would not unnecessarily increase their own future difficulties by this policy.[2]

The international aspects of the problem are more complicated, and cannot be considered here in detail. It is sometimes contended that Germany is forced to follow the present policy of barren investment because this investment needs relatively little foreign raw material, whilst an increase in consumption would necessitate increased imports. This argument overlooks the fact that at least part of those products which are now needed for rearmament could be exported.[3] *Any* foreign product obtained in exchange for this additional export would be a net gain as far as the real income of the community is concerned. The extent of the gain would depend, of course, on the elasticity of demand for German products and the state of prosperity in the rest of the world.[4] But the scarcity of foreign exchange at this high level

[1] In March 1938 all juveniles leaving school were ordered to report at Labour Offices. No apprentices can be employed without the consent of these authorities. Last month a decree introducing compulsory labour duty was published in order to ensure re-entry into heavy industries of skilled workers who had left it. The liberty of choice of profession or of habitat has gradually been abolished since the introduction of the labour identification card.

[2] This conclusion is supported by the fact that the Austrian gold and foreign exchange reserve was not used to lessen the frictions of the system and prepare for increased exports, but for the establishment of stocks of war materials.

[3] The recent barter of the armaments of the late Austrian army for wheat and pork is a striking example of what could be achieved in this direction.

[4] Indeed, the present central control of foreign trade, with the possibility of establishing export prices irrespective of cost, shifting the burden on the community (consumers in general or on particular industries), offers a powerful weapon of dumping which need not even involve too great a loss on the community practising it, as its industry continues to be fully employed, whilst the individualist competitor is put out of action. The discontinuance or slackening of armaments may herald a period of intense competition by Germany at a time when in other countries in which risk-bearing is still individual the very same industries will also be at a somewhat low ebb. This threat does not seem to be realised as a general problem, though in single cases German exports arouse much ire.

of German internal investment for unproductive purposes is the direct effect, and not the cause, of the present policy. If she so desired, Germany could within wide limits reverse her policy of restricting an increase of consumption. The argument that the threat of war originates in discontents of an economic character is thus shown to be based on circular reasoning.

These considerations seem to demonstrate: (*a*) that the Nazi Government has succeeded in evolving an—initially empirical—system which—provided the available powers of control are ruthlessly and skilfully used—is not subject to fluctuations in employment (though subject to fluctuations in real income on account of inevitable changes in the terms of its foreign trade); [1] (*b*) that this system is based on three main controls, of costs, of investment and of international trade; (*c*) that this system is economically stable on its own terms in so far as it does not involve cumulative processes undermining the standard of life; (*d*) that the real sacrifice [2] imposed on the German population by militarisation (rearmament and self-sufficiency) is very much less than commonly supposed. Most of the difficulties and frictions are not necessary consequences of this system itself, but of the aims which it has been made to serve and which are by no means identical with the system.

The German picture exhibits the signs of an economy on war footing using fully those reserves of moral and material character which in other countries are not usually mobilised before the beginning of hostilities. The use of these reserves has hitherto yielded impressive returns. It is questionable whether a further intensification would not have different results. The intense activity, the incentive for which lies beyond the material sphere, must imply an increasing strain on the people which will inevitably have its repercussions in the longer run. And if the stability of employment is safeguarded, the flexibility of the system is being impaired.[3]

[1] German experiences, therefore, cannot be applied directly to problems of free systems. The investigation of how far methods compatible with democratic government can achieve identical means is a different and vitally important task.

[2] In the historical sense, Germany has sacrificed a potential increase of consumption.

[3] The recent decline of the security prices on the German Stock Exchanges aroused much comment. A host of explanations has been put forward both in Germany and abroad. No evaluation of these comments has been possible, as the necessary statistical material is not available. Some tentative suggestions, however, may be put forward.

(1) The semi-official explanation which attributes the slump to the consequences of the systematic campaign of the expropriation of the Jewish population is not sufficient. Nor does the suggestion seem altogether plausible that

But the above considerations make it also clear that no complacency whatever is justified in the free countries, which seem to have failed in the task of utilising fully their far superior economic power, on account of the present economic position and outlook in Germany.

THOMAS BALOGH

University College,
London.

---

the international political crisis is entirely responsible for the fall. In that case shares would hardly have declined more than bonds. The export of capital is not easy from Germany in bulk. Thus, if a catastrophe were feared, shares would be preferred to bonds, even if the yield on shares were smaller and were expected to fall further as a result of increased taxation. No attention need be paid to that vulgar explanation which believes that fear of inflation is responsible for the slump.

(2) It seems at least probable that this decline in share prices is due to a deflationary policy by the banking authorities. They were unable to check the further expansion of State expenditure. Thus, to obviate the necessity of further extension of direct controls over private consumption they have produced, what to all intents and purposes, comes near to a deflationary crisis. *Otherwise, and this cannot be emphasised too strongly, the Reichsbank and the banking system could have created the credit and currency necessary to stem the wave of liquidation.* It may well be that an additional reason for this policy was the desire to cause as much loss to the unfortunate minority as possible.

(3) The increase of State expenditure will in all probability prevent this crisis in the private economic sphere from having any effect on *total* employment, though there might be a further shift away from consumers' goods. On the contrary, the shrinkage in the private economic sphere is a *necessary condition* to this *further expansion* of State expenditure now that no unemployed reserves are at the disposal of the Government. Profits will be reduced, not only by the increase of taxation but because rising marginal costs (due to the employment of less skilled labour and the use of obsolete equipment) is prevented from having its full effect on prices. At the same time, the quantity of goods available for private demand is also being reduced.

(4) No breakdown of the mechanism of State finance must be expected. The only danger to the present Nazi system lies in the undue increase in consumption demand. If the present deflationary measures fail, there will have to be an extension of direct controls and the banking system will recommence to finance by the creation of credit. The suggestions that the banks are unable or unwilling to extend credit or to buy Government securities are wholly beside the point. They have no will of their own. The present antics are performed, as we have pointed out above, in the hope of being able to stem the trend towards complete nationalisation and State control of industry and distribution, which is the logical consequence of the ever increasing demands of the State on the productive system.